## **USER'S MANUAL**

# MITSUBISHI HEAVY INDUSTRIES LTD. PACKAGED AIR CONDITIONER MULTI-SERIES

Ceiling Recessed Type (FDT, FDTC)

Ceiling Recessed Type, 2-Way Air Direction (FDTW)

Ceiling Recessed Type, 1-Way Air Direction (FDTS) (FDTQ)

Ceiling Recessed Cassetteria Type (FDR)

High Static Pressure Duct Type (FDU)

Middle Static Pressure Duct Type (FDUM) (FDQM)

Ceiling mounted duct Type (FDUR)

Ceiling Suspended Type (FDE)

**Wall Mounted Type (FDK)** 

Floor Standing, Lowboy Type (Exposed Type) (FDFL)

Floor Standing, Lowboy Type (Concealed Type) (FDFU)

**Ultra thin ducted Type (FDQS)** 

USER'S MANUAL ENGLISH

\_\_\_\_

MANUEL DE L'UTILISATEUR FRANÇAIS

ISTRUZIONI PER L'USO ITALIANO

ANWENDERHANDBUCH DEUTSCH

MANUAL DEL PROPIETARIO ESPAÑOL

GEBRUIKERSHANDLEIDING NEDERLANDS

MANUAL DO UTILIZADOR PORTUGUÊS

ΟΔΗΓΙΕΣ ΧΡΗΣΗΣ ΕΛΛΗΝΙΚΑ

РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ РУССКИЙ

KULLANIM KILAVUZU TÜRKÇE

 $\epsilon$ 

This air conditioner complies with EMC Directive 89/336/EEC, 92/31/EEC, 93/68/EEC, LV Directive 73/23/EEC. CE marking is applicable to the area of 50 Hz power supply.

Ce climatiseur est conforme à la Directive EMC: 89/336/EEC, 92/31/EEC, 93/68/EEC, LV Directive 73/23/EEC. La marque CE s'applique aux régions alimentées en courant de 50 Hz.

Dieses Kimagerät erfüllt die EMC Direktiven 89/336/EEC, 92/31/EEC, 93/68/EEC, LV Direktiven 73/23/EEC.

Die CE-Marke gilt für Bereiche mit einer Netzstromversorgung von 50 Hz.

Questo condizionatore d'aria è conforme alla Direttiva EMC: 89/336/EEC, 92/31/EEC, 93/68/EEC, LV Direttiva 73/23/EEC. Il marchio CE è applicabile alla fascia di alimentazione 50 Hz.

Este acondicionador de aire cumple con la directiva EMC: 89/ 336/EEC, 92/31/EEC, 93/68/EEC, LV Directiva 73/23/EEC. La indicación CE sólo corresponde al área de suministro eléctrico de 50 Hz.

Deze airconditioner voldoet aan EMC Directive 89/336/EEC, 92/31/EEC, 93/68/EEC, LV Directive 73/23/EEC. CE-markering is van toepassing op het gebied met een netstroom van 50 Hz.

Este aparelho de ar condicionado está em conformidade com a Directiva EMC 89/336/CEE, 92/31/CEE, 93/68/CEE, a Directiva LV 73/23/CEE.

A marca CE aplica-se à zona de fornecimento de energia a 50 Hz.

Αυτό το κλιματιστικό είναι σύμφωνο με τις προδιαγραφές των Οδηγιών ΕΜC 89/336, 92/31 και 93/68 της ΕΟΚ και της Οδηγίας LV 73/23 της ΕΟΚ .
Το σήμα CE ισχύει μόνον σε περιοχές όπου η

τροφοδοσία είναι 50 Hz.

PCA012A001



Thank you very much for your purchase of this package air conditioning system made by Mitsubishi Heavy Industries. Please read through this manual before using the product and use the product appropriately according to the instructions in the manual. After you have read the manual, store it with the warranty certificate in a safe place. It will help you when you have questions or problems.

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## **SAFETY PRECAUTIONS**

- Please read these "SAFETY PRECAUTIONS" before starting to use this product and use the product appropriately according to the instructions
- The precautions provided here are classified into "△ DANGER" and "△ CAUTION" Potentially hazardous situations that may lead to serious outcomes such as death and serious injuries if the product is mishandled, in particular, are grouped together and described in the "△ DANGER" sections. Note, however, that depending on the situation, the items listed in the "△ CAUTION" sections do also have the potential of causing serious outcomes. Both warnings and cautions tell you important information related to safety; please make sure to observe them.
- The symbols used throughout the main text of this manual have the following meaning:



Strictly prohibited.



Observe instructions with great care.



Provide positive earthing.

**ENGLISH** 

After you have read the manual, always store it at a place where other users of the system can refer to it at any time. If a new owner
takes over the system, make sure to pass this manual to that person.

### **INSTALLATION PRECAUTIONS**

#### **△ DANGER**

Make sure to request the dealer from whom you have purchased the product or a specialist to install the product.



If you install the product by yourself and the product is not correctly installed, water leakage, electric shock and/or fire may occur.

Make sure to use accessories specified by Mitsubishi Heavy Industries. Request a specialist to install them.



If you install the accessories by yourself and the accessories are not correctly installed, water leakage, electric shock and/or fire may occur.

If the refrigerant leaks and the critical concentration is exceeded, accidents may occur due to oxygen deficiency. Moreover, if the refrigerant gets into contact with flames, for instance from a fan heater, space heater, cooking stove, toxic gases may be generated. If the refrigerant is found to be leaking, extinguish any flames in the room and ventilate the



### **△** CAUTION

Make sure to perform grounding work.



Do not connect the ground wire to a ground wire connected to any gas pipes, water pipes, lightning conductors or telephones. Incomplete grounding may cause electric shock.

It is necessary to install a leakage breaker.



If a leakage breaker is not installed, electric shock may happen.

Do not install the air conditioning system in a place where there is any possibility that combustible gas may leak.



If such gas leaks and accumulates around the unit, the gas may catch fire.

Make sure to construct the drain piping so that water is securely discharged.



If the piping construction is inadequate, water may leak and wet household goods.

Construct the system in such a way as to prevent parts from being overturned in areas subjected to the effects of strong wind.



Strong wind may overturn an outdoor unit, leading to injury.

Install the air conditioning system securely in a place that can stand the weight of it.



If the installation is inadequate, the unit may overturn or fall down, leading to injury.

### **I OPERATION PRECAUTIONS**

### **△ DANGER**

Do not subject your body to cooled air for a prolonged period or cool it too



You may experience bad physical conditions or health problems

Do not insert fingers and/or other elongated devices in the air outlet and inlet openings.



The fan inside rotates at high speeds, leading to

If the air conditioning system is submerged under water due to a natural disaster such as a flood or a typhoon, consult the dealer from whom you purchased the air conditioning system.



Operating the air conditioning system under such conditions may lead to failure, electric shock and/or

If the air conditioning system is under abnormal conditions (e.g., if it has burned out), stop the operation, turn the power supply switch off and consult the dealer from whom you purchased the air conditioning system.



Continuing operating the air conditioning system under abnormal conditions may lead to failure, electric shock and/or fire.

The blower, even if it is stopped, may suddenly begin to operate: do not insert fingers and/or other elongated devices.



Performing such acts may cause injury.

If the refrigerant leaks and the critical concentration is exceeded, accidents may occur due to oxygen deficiency. Moreover, if the refrigerant gets into contact with flames, for instance from a fan heater, snace heater, cooking stove, toxic gases may be generated. If the refrigerant is found to be leaking, extinguish any flames in the room and ventilate the room.



### **△** CAUTION

Do not use the air conditioning system for unintended purposes such as storage of food, animals/plants, precision instruments or art objects.



The quality of food etc. may be degraded

Do not operate the switches with wet hands.



It may lead to electric shock

If the ventilation is insufficient, accidents due to oxygen deficiency may occur.

If the air conditioning system is operated

in an environment where burning

appliances are used, make sure to

ventilate the room frequently.

Do not place burning appliances in places directly subjected to the airflow from the air conditioning system.



Burning appliances may suffer from incomplete combustion.

Make sure that the installation foundation etc. is not damaged due to longterm use.



If it is left under damaged conditions, the unit may fall down, causing injury.

Do not wash the air conditioning system with water. In case of washing the unit consult the dealer from whom you purchased the air conditioning system.



It may cause electric shock

Do not install the air conditioning system at a place where animals/plants are subjected to the airflow directly.



The animals/plants may be adversely affected.

When you clean the air conditioning system, make sure to stop the operation and turn the power supply switch off



The fan inside rotates at high speeds, leading to

Make sure to use only fuses of the right capacity



Using wire or copper wire may lead to failure and/

### SAFETY PRECAUTIONS

### **∧** CAUTION Do not allow combustible spray near

Do not sit on the air conditioning system or place objects on it.



The air conditioning system may fall down or overturn, leading to injury.

the air conditioning system, nor spray it directly to the air conditioning system.



It may catch fire.

Do not use the air conditioning system with the outlet/inlet grills removed.



It may lead to injury.

Do not operate or stop the air conditioning system with the power supply switch.



It may cause fire and/or water leakage. Moreover, if the power failure compensation is enabled, the fan may start rotating suddenly, leading to injury.

If the swing louver is operating, do not touch the outlet opening.



It may lead to injury

Do not pull the remote controller cable



Part of the conductor may be disconnected, leading to electric leakage.

Do not use appliances such as water heaters near the indoor unit and remote controller.



If appliances generating vapor are used near the indoor unit and/or remote controller, water drops may condensate at the cooling operation or electric leakage/short circuit may occur.

Do not place objects below the air conditioner that might be damaged by dampness or moisture.



If the drain clogs or humidity rises to 80% or higher, then vapor from the indoor unit might form into droplets and cause damage

### **■ PRECAUTIONS FOR TRANSFER OR REPAIR**

Never modify or disassembling the air conditioning system. If it requires service, consult the dealer from whom you purchased the air conditioning system.



If servicing is inadequate, water leakage, electric shock and/or fire may occur The refrigerant used in the air conditioning system is safe. The refrigerant usually does not leak, but if it leaks inside the room and gets into contact with flames, for instance from a fan heater, space heater, cooking stove, toxic gases may be generated.

When you receive service for leakage of the refrigerant, make sure to confirm with the service personnel that the leakage areas have been repaired correctly

system, consult a dealer or specialist.



If the air conditioning system is installed incorrectly, water leakage, electric shock and/or fire may occur.

Always switch off the "indoor unit power supply breaker" before inspecting or repairing the indoor unit.

If it is required to move and reinstall the air conditioning



Doing inspection or repair work with the indoor unit power supply breaker ON can result in injury from electrical shock or from the rotation of the indoor unit

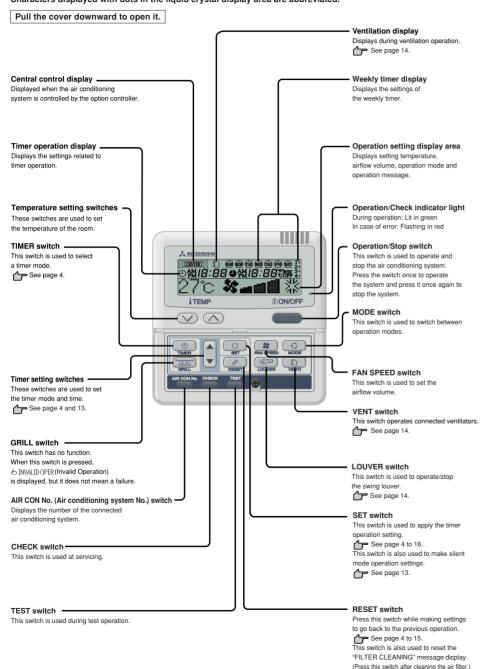
### **■ PRECAUTIONS FOR WASTE DISPOSAL**



Your Air Conditioning product may be marked with this symbol. It means that waste electrical and electronic equipment (WEEE as in directive 2002/96/EČ) should not be mixed with general household waste. Air conditioners should be treated at an authorized treatment facility for re-use, recycling and recovery and not be disposed of in the municipal waste stream. Please contact the installer or local authority for more information.

## NAMES AND FUNCTIONS OF THE REMOTE CONTROLLER SWITCHES

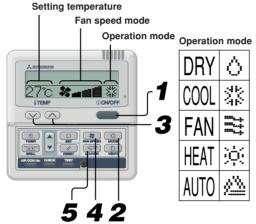
The figure below shows the remote controller with the cover opened. Note that all the items that may be displayed in the liquid crystal display area are shown in the figure for the sake of explanation. Characters displayed with dots in the liquid crystal display area are abbreviated.



## HOW TO USE THE AIR CONDITIONING SYSTEM

## HOW TO OPERATE THE AIR CONDITIONING SYSTEM

- Request: 
  When you operate the air conditioning system at the start of the season or after it has been stopped for a prolonged period, turn the power switch on (ON) 12 hours before starting the air conditioning operation in order to protect the air conditioning system (the current is conducted into the crank case and warms the compressor). Do not turn the power supply switch off during the season. (The current is conducted to the crank case heater while the compressor is stopped, keeping the compressor warm and preventing failure of the compressor due to accumulation of liquid refrigerant.)
  - Do not turn the power supply switch off during the season. Do not turn the power supply switch of an unused indoor unit off either, keep it "ON." If the power supply to one of the indoor units in the same system is turned off, water may leak from the indoor unit (drained water overflows).
  - Turn the power supply switch off during the off-season in order to save electricity. (If the power supply switch is kept turned on, current
    continues to be conducted to the crank case heater and power is consumed even if the air conditioning system is not operated.)



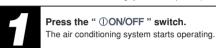
### Guideline for room temperature setting -

Cool	26 to	28°C
Dry	21 to	24°C
Heat	22 to	24°C
_		

• The settings of operation mode, temperature and airflow volume adjustment can be changed even when the air conditioning system is stopped. When a switch is pressed while the operation is stopped, the corresponding display is turned on and you can change the setting. The display turns on for three seconds after changing the setting, then turns off automatically.



- The display of "OPERATION MODE INVALID" flashes and the operation is switched to "Fan" in the following case because the operation modes do not match.
- When other indoor units are operating in different modes (with KXR, the heating/cooling free layout multi system, it is possible to operate indoor units in different cooling/heating modes).
- Do not turn the air conditioning system on/off frequently.
- Do not use sharp objects to press the remote controller switches.



Press the " MODE" switch.

The range of operation modes is displayed according to the model of the indoor unit.

Every time the switch is pressed, the display changes in the order of "O (DRY)" -> "S (COOL)" -> "S (FAN)" -> "O (HEAT)" and then " (AUTO)". (The automatic operation can only be selected in case of the heating/cooling free layout multi system KXR. The automatic operation cannot be selected in case of KX.)

Press the Temperature setting switches.
Press the sor switch to set the room temperature.

Press the " FAN SPEED" switch.
The range of fan speed modes is displayed according to the model of the indoor unit.
In case of 3-speed:

- Press the switch once while the louver is moving to display the stop positions in order.
- 2. Press the switch once again at the desired stop position to stop the louver at that position.

Effective stop position.

At automatic operation: Middle At cooling/dehumidifying operation: Horizontal At heating operation: Downward



Stop

Press the " ON/OFF " switch.



● If you press any of the switches above and "ᡧ INVALTD OPFR" is displayed, the switch has no function.

 When you operate the air conditioning system for the first time after turning the power supply on, the air conditioning system starts operating with the following settings. Change the settings according to your preference.

When automatic operation is disabled, the air conditioning system operates in the following mode:

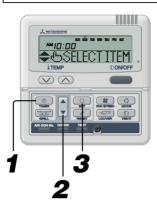
COOL if the remote controller suction temperature is 17  $^{\circ}\text{C}$  or more

HEAT if the remote controller suction temperature is less than 17 °C

- The operation may be stopped if you increase/decrease the setting temperature by pressing the temperature setting switches.
   This occurs because the temperature controller is activated; this is not a failure.
- At cooling (heating), the air conditioning system may activate the cooling (heating) operation to maintain a comfortable room temperature even when the room temperature is at the setting temperature or less (more); this is not a failure.
- During dehumidifying operation, the fan speed is adjusted automatically according to the room temperature, and may therefore
  change repeatedly between the strong, weak and stop speeds. The airflow volume cannot be adjusted by the FAN SPEED
  switch
- If the heating/cooling free layout multi system KXR is used and the operation mode is changed (from COOL to HEAT or from HEAT to COOL), the airflow volume becomes weak for three minutes.
- During automatic operation, the mode is switched between COOL and HEAT automatically according to the difference between
  the setting temperature and room temperature to keep the room temperature constant (in case of the heating/cooling free layout
  multi system KXR).

## **HOW TO PERFORM THE TIMER OPERATION**

## **SELECTING TIMER MODES**



Press the " TIMER" switch.

The remote controller goes into the timer mode.

The "current day of the week" and "current time" are displayed and the subsequent steps are automatically displayed as follows.

[Example] In the case of Monday, 10 o'clock in the morning

Display area: "

" MILITION "

" SELECTITEM" (lit for 1 second)

" SET " (lit for 1 second)

" CLOCK SET " (lit)

2

### Press the $\blacktriangle$ or $\blacktriangledown$ switch.

If you press the w switch, the display of the following timer modes is switched in the downward direction.

" ② CLOCK SET ▼ " (Adjust the current time)

"  $\mathop{\Im} \mathsf{SLEEP} \, \mathsf{TIMER} \, \mathop{\clubsuit} \, \mathsf{"} \, (\mathsf{Turn} \, \, \mathsf{off} \, \, \mathsf{after} \, \, \mathsf{the} \, \, \mathsf{specified} \, \, \mathsf{time})$ 

" • OFF TIMER • " (Turn off at the specified time)

WFFKIYTIMFR ♣ " (Select the weekly timer mode)

"TIMER CANCEL ...." (Cancel the timer setting)

If you press the \_\_ switch, the display of the timer modes is switched in the upward direction.

3

Press the " SET" switch.

The selected timer mode is committed.

For instructions on using each timer mode setting, see the next page and beyond.

It is also possible to select a combination of timer modes. The upper left modes can be selected at the same time.

NOTE

- If you press the " ON/OFF" switch while in the timer setting mode, the remote controller exits from the timer mode
  and returns to the original display. Please be aware that settings that have not been committed become invalid.
- If you have selected the on timer mode and either the off timer or sleep timer mode at the same time with the same time setting, the timer mode that turns off the operation (the off timer or sleep timer mode) takes the precedence.
- If you press any of the timer-related switches and "&" INWAI ID ()PFR " is displayed, the switch cannot be operated because the switch operation is disabled. To enable the operation, consult the dealer from whom you purchased the air conditioning system.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display.
- If a power failure occurs, the timer settings that have been specified are canceled. Weekly timer settings will return to the display
  where all days of the week are selected as "holidays" after the power failure.

### Combination of Modes that can be Set Together

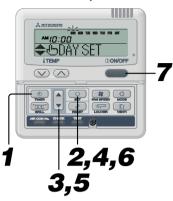
( ○ : Possible, × : Not possible)

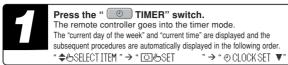
	Sleep timer	Off timer	On timer	Weekly timer
Sleep timer		×	0	×
Off timer	×		0	×
On timer	0	0		×
Weekly timer	×	×	×	

If you select a combination of modes that cannot be set together and press the SET switch, the message " I MALID OPER" (Invalid Operation) is displayed for 3 seconds, and the display returns to the display selected in step 2.

## **ADJUSTING THE TIME**

Timer operation is performed based on the time adjusted with the steps described in this section. Make sure to adjust the remote controller to the current time correctly.





Press the " SET" switch.
The remote controller goes into the adjusting the time mode.
The display area shows the following:

" SUN MON TUE WED THU FRI SAT" ( To flashes)

" AM [:: III " (Current time)
" 

\*\* ◆\* DAY SET "

Press the ▲ or ▼ switch.

Set the ▼ mark displayed above the days of the week to indicate the current day of the week.

Press ▲ to move to the right and ▼ to move to the left.

"SET+Old" " and "RETHRN+⊘ld" " are displayed."

alternately.

Note: If you press the " RESET" switch, the remote comtroller

Note: If you press the " □ HESE I" switch, the remote comtroller will return to one screen earlier and display "② CLOCK SET ▼".

Press the " ○ SET" switch.

The day of the week is committed and the ▼ mark changes from flashing to lit.

The "current time" flashes in the on timer display area and

The "current time" flashes in the on timer display area at "

"is displayed in the display area."



Press the ▲ or ▼ switch.
"SET+⊙IIII " and "RETURN+☑III " are displayed alternately.

Adjust the displayed time to the current time.

● Press the ▲ or ▼ switch briefly to increase or decrease the displayed value by 1 minute.

 If you continue pressing the ▲ or ▼ switch, the display will change in increments of 10 minuutes.

Note: If you press the "RESET" switch, the remote controller will return to one screen earlier.

Press the " SET" switch.

The time display changes from flashing to lit.

" ♠ CLOCK SET OK " is displayed and the current time is set.

After 2 seconds, the remote controller returns to the timer mode selection screen and displays " ♠ CLOCK SET ▼ ".

Step 1

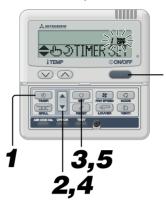
Press the " <code>①ON/OFF</code> " switch once time setting is finished.

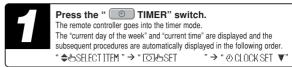
## NOTE

- If you press the " ①ON/OFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display. Please be aware that settings that have not been committed become invalid.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display.

## **SLEEP TIMER MODE**

In this mode, the air conditioning system stops operating when the set time has elapsed.





Press the ▼ switch one time.

" ② CLOCK SET ▼ "

" ② SLEEP TIMER ♦ " (first press)

Press the " SET" switch.

The sleep timer has been set.

The air conditioning system starts operating if the sleep timer is set while the air conditioning system is stopped.

" TIMER SET OK " is displayed in the display area. The display then returns to the timer mode selection screen as shown below.

<If set to turn off after 10 hours>
"ID" 答案" (lit)
"③TIMER SET OK " (lit for 2 seconds)

↓
"ID" 答案" (lit)
"③SEEP TIMER ◆ " (lit)

After the setting, the remaining time is displayed in decrements of 1 hour as the time passes. The air conditioning system stops operating when the set time has elapsed. The time display also turns off.

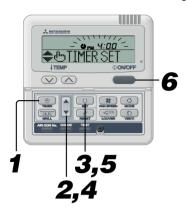
Press the " ①ON/OFF " switch once.
This completely ends the time setting procedure.



- If you press the "①ONOFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display.

### **OFF TIMER MODE**

In this mode, the air conditioning system stops the operation at the set time.





Press the ▼ switch two times.

" ② CLOCK SET ▼ "

" ② SLEEP TIMER ◆ " (first press)

" ④ OFF TIMER ◆ " (second press)

Press the " O SET" switch.
The remote controller goes into the OFF timer mode.

[Example] " O PM Y: III The stand The stand The stand The stand The stand The stand The standard The standa

Press the ▲ or ▼ switch.

"SET→○ ♣ "and "RETURN→ ② ♣ "are displayed alternately.

Set the time at which you want to stop the operation.

Setting "hours"

Keep the ▲ or ▼ switch pressed long enough to change the "hour" display in increments/decrements of 1 hour. Release the switch to stop changing the hours.

Setting "minutes"

Press the ▲ or ▼ switch briefly to increase or decrease the displayed value by 10 minutes.

Note: If you press the " ─ RESET" switch, the remote controller will return to one screen earlier and display

" ♣ OFF TIMER ♣ ". Step 2

Press the "OSET" switch.
The off timer has been set.
"OTIMER SET OK" is displayed in the display area. The display then returns to the timer mode selection screen as shown below.

Step 2

If set at 6:00 pm>

PM 5:00 " (lit)

TIMER SET OK" (lit for 2 seconds)

PM 5:00 " (lit)

OFF TIMER \$ " (lit)

The air conditioning system stops operating at 6 o'clock in the afternoon.
The time display also turns off.



### Press the " ①ON/OFF " switch once.

This completely ends the time setting procedure.

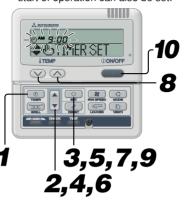
If you want to start operating the air conditioning system with the off timer setting, the air conditioning system must be operated before the timer is set.



- If you press the " ON/OFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display.

### **ON TIMER MODE**

In this mode, the air conditioning system starts the operation at the set time. The temperature at the start of operation can also be set.



Press the " ② TIMER" switch.
The remote controller goes into the timer mode.
The "current day of the week" and "current time" are displayed and the subsequent procedures are automatically displayed in the following order.

"◆SELECTITEM" → " ② SET " → " ② CLOCK SET ▼"

Press the ▼ switch three times.

" ② CLOCK SET ▼ "

" ③ SLEEP TIMER ♦ " (first press)

" ④ OFF TIMER ♦ " (second press)

" ② ON TIMER ♦ " (third press)

Press the "O SET" switch.
The remote controller goes into the ON timer mode.

[Example] "OM S: III " flashes and " turns on.

Press the ▲ or ▼ switch.

alternately.

Set the time at which you want to start the operation.

Setting "hours"

Keep the ▲ or ▼ switch pressed long enough to change the "hour" display in increments/decrements of 1 hour.

Release the switch to stop changing the hours.

Setting "minutes"

Press the ▲ or ▼ switch briefly to increase or decrease the displayed value by 10 minutes.

Note: If you press the " ✓ RESET" switch, the remote controller will return to one screen earlier and display

"② ON TIMER ♣"

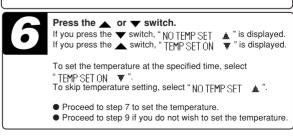
"SFT+ெடு " and "RFTURN+ெடு " are displayed

Press the " SET" switch.
The on timer has been set.
The display area shows the display shown to the left.
<|f set at 10:00 am>

" MM II: III " (lit)

"TEMP SET ON I (lit)

Note: If you press the " RESET" switch, the remote controller will return to one screen earlier.







Press the " SET" switch.

The display area shows the display shown to the left. < If set at 10:00 am>

- " (lit)
- " **Z 7c** " (The display of the currently set temperature flashes.)
- "V∧&SETUP "(lit)



Press one of the temperature setting switches,

"SET→○⊕ "and "RETURN→☑⊕ "are displayed alternately.

Press either the or switch to increase or decrease the displayed value by 1°C.

Set the temperature at the start of operation.

Note: If you press the "RESET" switch, the remote

9

Press the " SET" switch.

The on timer is set and the display area shows
"②TIMER SET OK" and then returns to the timer mode

selection screen as shown below.

Step 2

<lf set at 10:00 am>

- " (if the temperature was set) (lit)
- "⊕TIMER SET OK " (lit for 2 seconds)

The air conditioning system starts operating at the set temperature at the set time.

The time display turns off.



Press the " ON/OFF " switch once.

This completely ends the time setting procedure.

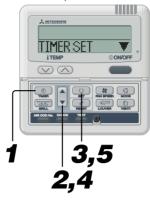


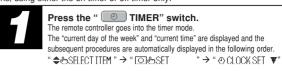
- If you press the "ON/OFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display.
- If you have selected the on timer mode and either the sleep timer or off timer mode, the temperature setting of the on timer is not displayed.
- If you have selected the same time setting for the on timer mode and either the off timer or sleep timer mode simultaneously, the timer mode that turns off the operation (the off timer or sleep timer mode) takes the precedence.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display.

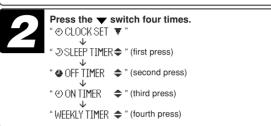
## **WEEKLY TIMER MODE**

### ■ Selecting Weekly Timer Modes

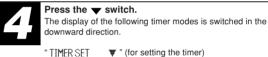
With this mode, it is possible to perform up to four on timer or off timer operations for each day of the week. It is also possible to set four timer operations, using either the on timer or off timer only.











If you press the \_\_ switch, the display of the timer modes is switched in the upward direction.

Select one of the modes.

Note: If you press the " RESET" switch, the remote controller will return to one screen earlier and display " WEFKLY TIMER ♣ ".

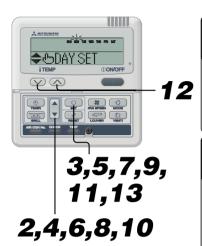






- If you press the "①ONOFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display.

### ■ Weekly Timer Setting



If Monday is set>

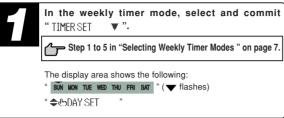
<Example>

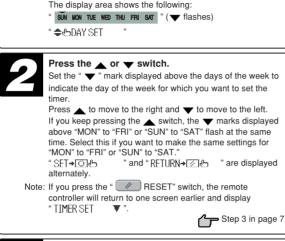
Number 1

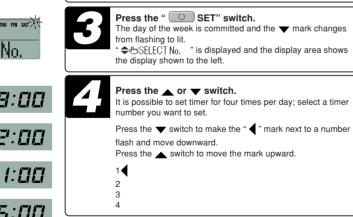
Number 2

Number 3

Number 4

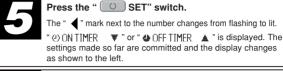












Press the ▲ or ▼ switch.

If you press the ▼ switch, " ♣ OFF TIMER ♣ " is displayed.

If you press the ▼ switch, " ↩ ON TIMER ▼ " is displayed.

Press the switch corresponding to the timer you want to set.

Note: If you press the " RESET" switch, the remote

Press the " SET" switch.
" ♦⊕TIMER SET " is displayed.

controller will return to one screen earlier.

Press the ▲ or ▼ switch.

Set the time.

See step 2 on page 6 for the on timer.

See step 2 on page 6 for the off timer.

Note: If you press the "RESET" switch, the remote controller will return to one screen earlier.

Press the " SET" switch.
The time display changes from flashing to lit and the setting is committed.

If you have set the off timer operation, the first setting has

been completed.

A " " mark is lit under the day of the week for which you

made the setting ( MON → MON ) and the display shown to the left appears.

Proceed to " Next Setting and Exiting Weekly Timer Mode'

Proceed to "Next Setting and Exiting Weekly Timer Mod on page 9.

If you have set the on timer operation, "TEMP SET ON ▼ " is displayed; proceed to step 10.

▼ mark changes

display area shows

on timers or only off timers.

Note: Four operations can be set with only









### Press the ▲ or ▼ switch.

Select either "TEMP SET ON ▼ " or "NO TEMP SET ▲ ". To set the temperature at the specified time, select TEMP SET ON ▼ ".

To skip temperature setting, select "NO TFMP SFT ... ".

### Press the " SET" switch.

A " " mark is lit under the day of the week for which you made the setting (MON -> MON) and the display shown to the Proceed to step 1"Next Setting and Exiting Weekly

Timer Mode," at right.

### Press one of the temperature setting switches. or $\wedge$



Press either the or switch to increase or decrease the displayed value by 1 °C.

Set the temperature at the start of operation.

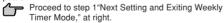
Note: If you press the " RESET" switch, the remote controller will return to one screen earlier and display "TEMP SET ON ▼".

#### Press the " SET" switch.

The first setting has been completed.

The temperature display changes from flashing to lit. A " " mark is lit under the day of the week for which you made the

setting ( $MON \rightarrow MON$ ) and the display shown to the left ap-



### ■ Next Setting and Exiting Weekly Timer Mode

After the display of " & SFI FCT

", " SELECT No.

" is displayed.



### Press the ▲ or ▼ switch.

Select the following items.

If you press the w switch, the display of the following items is switched in the downward direction.

"SELECT No. ▼ " (for selecting the next timer operation number for the same day of the week)

"DAY SET

\* " (for selecting the next day of the week)

" END

▲ " (for exiting the timer mode)

If you press the \_ switch, the display of the items is switched in the upward direction. Select either one of them.

### Press the " SET" switch.

If you have selected "SELECT No. ▼ ", " ♦ 5 SELECT No. is displayed.

Repeat step 4 and onward on page 8.

If you have selected "DAY SET "♣⊕DAY SFT " is displayed. Repeat step 2 and onward on page 8.

If you have selected "FND ler exits from the timer mode. in the remote control-

### ■ Display after Setting Weekly Timer Modes

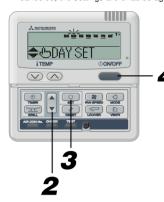
- The day of the week for which settings have been made is underlined.
- The mark is displayed above the current day of the week.
- The timer operation numbers set for the current day all turn on, the 4 mark indicates the next setting number to be activated, and the set time is displayed.
- The set timer operations are executed in the set order, and the number and time display turns off when all the timer operations for the current day have been executed.



- If you press the " ON/OFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display. Please be aware that settings that have not been committed become invalid.
- If you select a day of the week for which settings have already been made in the selection of the day of the week, all the timer numbers that have been set are displayed. The timer settings displayed, however, correspond to the number with the " < " mark displayed next to it. At this point, if you specify different settings, the displayed settings are changed to the new settir
- If you set the same time for the on timer and off timer operations for the same day, the off timer is set.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display

### ■ Weekly Timer Holiday Setting

It is possible to temporarily "disable" already set timer settings for individual days of the week. If the holiday setting is canceled, the settings are enabled again.



### In the weekly timer mode, select and commit

"HOLIDAY SET ♦".

Steps 1 to 5 in "Selecting Weekly Timer Modes" on page 7

The display area shows the following:

- " sum MON TUE WED THU FRI SAT "(▼ flashes)
- "�⊕DAYSET

2

### Press the ▲ or ▼ switch.

Set the mark displayed above the days of the week to indicate the day of week for which you want to set timer holiday.

Press ▲ to move to the right and ▼ to move to the left. If you keep pressing the ▲ switch, the ▼ marks displayed above "MON" to "FRI" or "SUN" to "SAT" flash at the same time. Select this if you want to set "MON" to "FRI" or "SUN" to "SAT" to holidays at the same time.

"SET→OLO "and "RETURN→IDO " are displayed alternately.

Note: If you press the " RESET" switch, the remote controller will return to one screen earlier and display "HOLIDAY SET ♣".

Step 4 in page 7

3

### Press the " O SET" switch.

The ▼ mark above the day of the week changes from flashing to lit, the day set as a holiday is lit with (), and the following is displayed. After the holiday setting has been completed, the remote controller returns to step 1. Repeat steps 2 and 3 to continue setting further holidays.

- " SUN  $\overline{\text{MON}}$  TUE  $\underline{\text{WED}}$  THU  $\underline{\text{FRI}}$  SAT " (lit)
- "HOLIDAY SET OK " (lit for 2 seconds)
- " SUN MON TUE WED THU FRI SAT " (lit)
- "DAY SET # " (lit)

NOTE

If you selected a day of the week for which no timer operation is set,
 "NO SETTING" is displayed for 2 seconds and the display returns to the one shown in step 1.

4

### Press the " ①ON/OFF " switch once.

This completely ends the noliday setting procedure.

### ■ Canceling Holiday Setting

### In the weekly timer mode, select and commit

"HOLIDAY SET ♦ "-

Steps 1 to 5 in "Selecting Weekly Timer Modes" on page 7

2

### Press the ▲ or ▼ switch.

Select a day of the week that has been set as holiday.

3

### Press the " SET" switch.

The display of () turns off and the following is displayed. After the holiday setting has been canceled, the remote controller returns to step 1. Repeat steps 2 and 3 to continue canceling further holiday settings.

- " SUN MON TUE WED THU FRI SAT " (lit) "HOLIDAY CANCEL" " (lit for 2 seconds)
- "SUN MON TUE WED THU FRI SAT" (lit)



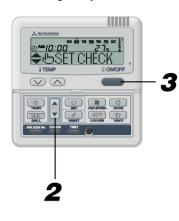
### Press the " ①ON/OFF " switch once.

This completely ends the noliday setting procedure.



- If you press the "①ONOFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display. Please be aware that settings that have not been committed become invalid.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display.

### ■ Checking Weekly Timer Modes



In the weekly timer mode, select and commit "CHECK/RESET ..."

Steps 1 to 5 in "Selecting Weekly Timer Modes" on page 7

The remote controller shows the display shown to the left and the settings for the number of the earliest timer operation for the set day of the week.

Press the ▲ or ▼ switch.

The settings are displayed for each day of the week, in the order of their setting numbers.

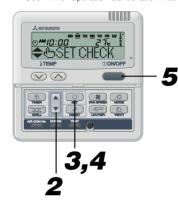
Press the  $\blacktriangledown$  switch to display settings starting from Sunday, in order from the smallest setting number.

Press the  $\underline{\hspace{0.1in}}$  switch to display the settings in the reverse order.

Press the " ①ON/OFF" switch once.
The remote controller exits from the timer mode.

■ Canceling Weekly Timer Mode Settings

It is possible to cancel weekly timer mode settings of each day of the week, as well as individual setting numbers. See "Timer Operation Cancellation Mode" on page 12 to cancel settings of all the days of the week at once.



In the weekly timer mode, select and commit "CHECK/RESET ...".

Steps 1 to 5 in "Selecting Weekly Timer Modes" on page 7

The remote controller shows the display shown to the left and the settings for the number of the earliest timer operation for the set day of the week.

Press the ▲ or ▼ switch.

The settings are displayed for each

The settings are displayed for each day of the week, in the order of their setting numbers.

Press the w switch to display settings starting from Sunday, in order from the smallest setting number.

Press the \_\_ switch to display the settings in the reverse order.

Select the day of the week and setting number corresponding to the weekly timer setting you want to cancel.

"RESET→①也 " and "RETURN→②也 " are displayed alternately.

Press the " SET" switch.
"CANCEL SETTING?" is displayed.

Note: If you press the " RESET" switch, the remote controller will return to one screen earlier and display " ♣ MSET CHECK ".

Pre "SE

Press the " SET" switch.

"SET CANCELLED" is displayed. The displayed setting disappears and is canceled.

Repeat steps 2 to 4 to continue canceling other settings.

5

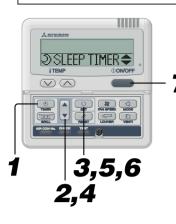
Press the " ON/OFF " switch once.

The remote controller exits from the timer mode.

NOTE

- If you press the "ON/OFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display.

## TIMER CANCELLATION MODE



Press the " TIMER" switch.

The remote controller goes into the timer mode.

The "current day of the week" and "current time" are dis-

The "current day of the week" and "current time" are displayed and the subsequent procedures are automatically displayed in the following order.

்⊕&SELECT ITEM "→"ெக்SET

"→"② CLOCK SET ▼"

2

Press the w switch five times.

- "⊕ CLOCK SET ▼"
- " ୬SLEEP TIMER ♣ " (first press)
- " ◆ OFF TIMER ◆ " (second press)
- " ② ON TIMER → " (third press)
- "WEEKLY TIMER 💠 " (fourth press)
- "TIMER CANCEL . " (fifth press)
- 3

Press the " SET" switch.

The remote controller goes into the timer operation cancellation mode.

4

Press the ▲ or ▼ switch.

Select the timer mode you want to cancel.

If you press the vwitch, the display of the following timer modes is switched in the downward direction.

" ⊅SLEEP TIMER ▼ "



" ◆ OFF TIMER ◆ "



"⊘ON TIMER 💠"



"WEEKLY TIMER ...... " (for canceling all days of the week)

If you press the  $\underline{\hspace{0.1in}}$  switch, the display of the timer modes is switched in the upward direction.



■ If you press the " ①ONOFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display.

 If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display. If "⇒SLEEP TIMER♥", "⊕ OFF TIMER ⇒ " or "⊕ ON TIMER ⇒ " was selected

5

Press the " SET" switch.
The settings of the selected timer mode

are displayed as shown below. (However, if no setting has been made, there will be no change from the display in step 4 even if the set switch is pressed.)

- <Display example where
- " ② ON TIMER ♣ " was selected>



If you stop canceling, press the

- " RESET" switch to return to the
- " ② ON TIMER ♣ " display (step 4).



Press the " SET" switch.
The timer display area turns off, the message "SET CANCELLED" is displayed for 2 seconds, and

"  $\Im SLEEP TIMER$  " is displayed again (step 4).

Repeat steps 4 to 6 to continue canceling other timer mode settings.

If " WEEKLY TIMER ... " was selected.

Perform the following operation to cancel settings for all the days of the week.

See "Canceling Weekly Timer Mode Settings" on page 11 to cancel settings for each day of the week.



Press the " SET" switch.

The following is displayed. (However, if no setting has been made, there will be no change from the display in step 4 even if the set switch is pressed.)



If you stop canceling, press the

- " RESET" switch to return to the "WFFKIYTIMFR . display (step 4).
- 6

Press the " SET" switch.
The day display area turns off,

- "SET CANCELLED" is displayed for two 2 seconds, and
- " ⊅ SLEEP TIMER ♥ " is displayed again (step 4).

With this operation, settings for all the days of the week are canceled.



Press the " (I) ON/OFF " switch once.

This completely ends the timer cancel procedure.



- If you press the "⊕ONOFF" switch while in the timer setting mode, the remote controller exits from the timer mode and returns to the original display. Please be aware that settings that have not been committed become invalid.
- If you do not press any switches for 60 seconds after entering the timer mode, the remote controller automatically exits from the timer mode and returns to the original display.

## **HOW TO OPERATE IN SILENT MODE**

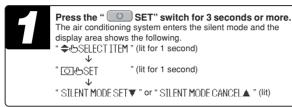
## SILENT MODE

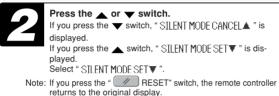
When the silent mode is set, the air conditioning system operates more quietly, i.e., noise from the outdoor unit is

The system starts the silent operation at the set time and stops the silent operation after the set time has passed. When the air conditioning system is set to operate in the silent mode, it repeats the silent operation and stopping every day at the same time, until the silent mode is canceled.

### ■ Setting Silent Mode



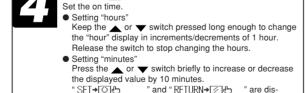


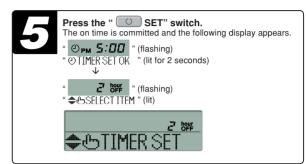




Press the ▲ or ▼ switch.

played alternately.

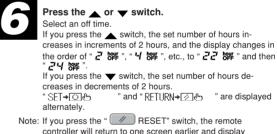




■ Canceling Silent Mode (Settings) 1 Press the " SET" switch for 3 seconds or more.

The air conditioning system enters the silent mode and the display area shows the following.

- " ♦⊕SELECT ITEM "(lit for 1 second) " 🖾 🖰 SET "(lit for 1 second) " STLENT MODE CANCEL ▲ "(lit)
- 2 Press the ▲ or ▼ switch Select " SILENT MODE CANCEL▲ "
- 3 Press the " SET" switch SET CANCELLED " is displayed. The Silent Mode settings are canceled.



controller will return to one screen earlier and display "�&TIMER SET

Press the " SET" switch. The settings are committed and displayed. "SET COMPLETE" is displayed and the silent mode setting is The display of the settings is turned off and the remote controller returns to the original display.

### NOTE

- After the silent mode is set, the following is displayed for 3 seconds at the set time and the remote controller returns to the
  - At the on time: "SILENT MODE ON 'At the off time: "SILENT MODE OFF'
- If you press the "NOWOFF" switch while in the Silent setting mode, the remote controller exits from the Silent setting mode and returns to the original display. Please be aware that settings that have not been committed become invalid.

## HOW TO ADJUST THE AIRFLOW DIRECTION

## AIRFLOW ADJUSTMENT BY THE LOUVER SWITCH (FOR INDOOR UNITS WITH THE AUTO SWING FUNCTION)

### To Move the Swing Louver

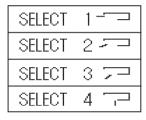




ditioning system is operating and the swing louver is stopped.

The swing louver moves up and down continuously and = "is displayed for 3 seconds.

### To Fix the Position of the Swing Louver





### To Fix the Position of the Swing Louver

louver is moving.

The four available directions in which the swing louver can be positioned are displayed for 2 seconds each in the order shown left.



you want to stop/fix the louver.

The display stops and the following is displayed, then the swing louver is stopped and fixed

(If fixed at position 1)

STOP

### Recommended Louver Fix Positions

Cool/Dry	SELECT 1 <sup>─</sup> □		
	SELECT 2 ₹□		
	SELECT 3 🖂		
	SELECT 4 🗀		
Heat	If you want to fix the louver at this position, make sure to turn the vertical louver to the left or right (in the case of FDE).		



" (PREPARATION OF HEATING) is displayed, the swing louver is automatically set at the horizontal position. When heater preparation is completed and the air conditioning system is switched to normal operation, the position of the swing louver returns to

the set position.

- The swing louver may be broken if you attempt to move it forcefully with your hands. Do not attempt to move it with your hands.
- Do not direct the airflow downward for extended periods of time at cooling operation. Dew may form on the side panel and drop from it (in the case of FDE).

# VENTILATION MODE OPERATION (WHEN A VENTILATOR IS INSTALLED)

When the ventilator is set to "NO VENTI LINK" (Ventilation not linked), the ventilator can be set to ON/OFF by itself, without regard to the operation or stopping of the air conditioner. When the ventilator is set to "VENTI LINK SET" (Ventilation linked), the ventilator will operate when the air conditioner operates.

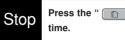
## NON-LINKED VENTILATION OPERATION





Press the " The VENTI" switch.

🖺 " is displayed, and ventilation operation begins.



Press the " VENTI" switch a second



• If no ventilator is connected, nothing will happen when the ventilation switch is pressed. ("Operation invalid" is displayed.)

## LINKED VENTILATION OPERATION





Press the " ON/OFF " switch.

If a ventilator is connected, ventilation will operate automatically. " 🖺 " is displayed.



Press the " ON/OFF" switch a scond time.



Clean the filer frequently.

Operation is invalid even if the ventilation switch is pressed.

## USING THE AIR CONDITIONING SYSTEM IN A COMFORTABLE MANNER

#### The filter should be cleaned Page 18 whenever the "FILTER If the filter is clogged. CLEANING" message is The cooling/heating efficiency becomes lower. Moreover, electricity is wasted and the operation makes more noise. displayed, as well as at the end A clogged filter may cause failures. of cooling and heating seasons. Dew may form and drop during the cooling operation Do not block the inlet and outlet Set a moderate room temperature Block direct sunlight and prevent draft openings of the indoor and outdoor units Excessive force must not be applied to the air Too much cooling or heating is not good for your Block direct sunlight with window blinds and curtains conditioning system; doing so may lead to failhealth. It is also a waste of electricity at cooling. Close the windows and doors except when ventilation is necessary Stop the operation and turn the Adjust the airflow direction properly If your feet feel cold at heating power supply off if there are any possibilities of lightning strikes Do not subject your skin to the airflow from the If the ceiling is high and the warm airflow does during a thunderstorm air conditioning system for prolonged periods not circulate down to your floor area suffiof time. Protect small animals and plants from ciently, it is recommended to use a circulation Failure to do so may lead to failure of the air such direct airflow as well fan. Consult the dealer for the details conditioning system.

## HOW TO MAINTAIN THE AIR CONDITIONING SYSTEM

### Cleaning the Air Filter

Clean the air filter regularly to perform cooling and heating operations in the most efficient and economical manner.

- A Caution: Make sure to stop the operation and turn the power supply switch off when you clean the air filter. The fan inside rotates at high speeds, leading to injury
- △ Caution: Fix the steps securely if you use them to install or remove the air filter.

The air conditioning system may fall down or overturn, leading to injury.

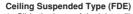
How to Remove the Air Filter (other than types whose panels automatically move up/down to make filter cleaning easier) Remove the air filter according to the procedure for each type.

#### Ceiling Recessed Type (FDT)

1. Hold the notches (in two places on the left and right sides) of the inlet grill and pull the inlet grill downward, opening it.



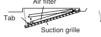
2. Pinch the hook parts (in two places on the left and right sides) at the bottom of the filter as shown in the figure below and pull the filter forward while pushing it upward slightly.



1. Slide the lever of the inlet arill in the direction of the arrow (→) and open the grill by swinging it down-



2. While light pushing up, remove the filter from the tabs at the left and right, and pull towards the front.





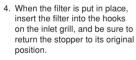
### Ceiling Recessed Type (FDTC)

1. Slide the inlet grill levers in the direction of the arrow (→), and open it downwards.



2. Turn the inlet arill stopper.

3. Pull the filter toward you.

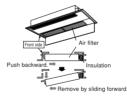


5. When putting the inlet grill back in place, slide the levers in the opposite Stopper direction and check to be sure that the grill does not come open.

Ceiling Recessed Type, 1-Way Air Direction (FDTS) 1. Slide the lever of the inlet grill in the direction of the arrow (→) direction and open the grill by swinging it

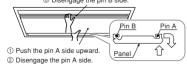


2. Push the air filter backward to disengage the front hook area, then slide the filter forward and remove



### Ceiling Recessed Type, 2-Way Air Direction (FDTW)

- 1. Push one side of the inlet panel (pin A side) upward.
- 2. Disengage the panel from pin A
- 3. Disengage the panel from the pin B and remove the panel. 3 Disengage the pin B side

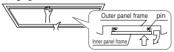


4. Press the knobs of the air filter inward, remove the hook area from the air conditioner unit, and remove the air filte

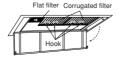


### Ceiling Recessed Cassetteria Type (FDR)

- 1. Push the inlet panel upward.
- 2. Pull the inlet panel outward. When the inlet panel is disengaged from the pins, it can be opened by swinging it downward.



- 3. Rotate the hooks and disengage the corrugated filter from the hooks.
- 4. Slide the flat filter toward the center and remove it.



### High Static Pressure Duct Type (FDU) Middle Static Pressure Duct Type (FDUM) (FDQM) Ceiling mounted duct type (FDUR) Ultra thin ducted Type (FDQS)

The air filter is mounted at the installation of the air conditioning system. Please obtain explanations on how to remove and clean the filter from the dealer from whom you purchased the air conditioning system.

#### **FDTQ Series**

1. Slide the lever of the suction grille in the arrow (→) direction to open the grille



2. While light pushing up, remove the filter from the tabs at the left and right, and pull towards the front.



#### Floor Standing, Lowboy Type (Exposed Type) (FDFL) Remove the front panel and pull the air filter out from the bottom of the unit

### Floor Standing, Lowbov Type (Concealed Type)

Pull the air filter out from the bottom of the unit.



### Wall mount type (FDK)

1. Pull up the suction grill forward. Hold the concave sections at both the right and left side with your hands and pull the suction grill forward. It stops while being open at about 60°.



2. Lightly hold the handle of the air filter, slightly lift it upward, and then pull it out forward.



#### How to Clean the Filter

- 1. Clean the filter under running water. If the filter is not very dirty, you can clean it by lightly dusting it off or by using cleaner. If it is very dirty, dissolve some neutral detergent in lukewarm water (approximately 30 °C), rinse the filter with it, and wash the detergent away from the filter completely.
- 2. Dry the air filter and mount it in the unit, then press the filter reset switch. In the case of unit types whose panels automatically move up/down to make filter cleaning easier, the filter is automatically set in place by operating the GRILL switch.

#### **A CAUTION** ⋅

- Do not dry the filter under direct sunlight or using fire. The filter will be damaged.
- Do not operate the air conditioning system while the air filter is removed. The air conditioning system may be damaged

### Maintenance of the Unit

• Clean the unit by wiping it with a piece of soft and dry cloth. If the unit is very dirty, wipe it with a piece of cloth wet with neutral detergent dissolved in lukewarm water and wipe it off with a piece of cloth soaked in clean water.

### At the End of the Season

- Make sure to turn the power supply switch off.
- The air conditioning system consumes several tens of watts of electricity even when it is stopped.
- Clean the air filter and mount it.
- Clean the indoor and outdoor units to remove any dirt.

#### At the Start of the Season

- Make sure that there is no object blocking the airflow around the inlet and outlet openings of the indoor and outdoor units.
- Inspect the air filter. If it is dirty, clean and mount it.
- Turn the power supply switch on 12 hours before starting the operation.

# TROUBLESHOOTING

Check the following items before requesting service.

	The unit does not work at all				
Is the power supply switch turned off?	Is there a power failure or is the fuse blown?	Is the leakage breaker activated?  This situation is dangerous. Turn the power supply off immediately and contact the dealer from whom you purchased the air conditioning system.			
	Poor cooling or heating				
Is the air filter clogged?	Is the swing louver horizontal (at heating)?  If the swing louver is horizontal, the airflow may not reach down to the floor.	Are there any obstacles blocking the air inlet and outlet openings?			
	Poor cooling				
Is direct sunlight coming into the room?	Are there any unexpected heat sources in the room?	Are there too many people in the room?			
No airflow at heating  Is the unit preparing the heater?  Page 18	If, after checking the items above, the air conditioning system still does not operate normally, stop operating the air conditioning system and contact the dealer from whom you purchased the system.  If the fuse and breaker blow frequently.  If water drips at cooling/dehumidifying operation.  If the operation or operation noise is abnormal.  If the check indicator light flashes.				

### The following does not mean malfunctions of the unit.

The air conditioning system sounds as if water is draining from it.	Sounds of rustling or gurgling may be heard when the operation is started, when the compressor is activated/deactivated during operation, or when the operation is stopped. These are the sounds of the refrigerant flowing through the system.
Sounds of rustling or gurgling may be heard from a stopped indoor unit.	These sounds can be heard when the air conditioning system is per- forming automatic control.
The airflow from the indoor unit smells bad.	The airflow from the indoor unit may smell bad if the smell of cigarettes, cosmetics and/or furniture has saturated the air conditioning system.
White vapor is generated from the indoor unit during operation.	White vapor may be generated during operation if the system is used in environment where oils and fats are frequently used, such as in restaurants. In this case, consult the dealer and clean the heat exchanger.
The operation switched to fan operation during cooling operation.	The operation may switch to fan operation automatically to prevent frost from building up on the surface of the heat exchanger. The operation will soon return to cooling operation.
The indoor fan does not stop even when the operation is stopped while heating operation.	The indoor fan may continue operating for approximately 40 seconds after the heating unit stops operating in order to remove after-heat of the auxiliary heater.
	Turn the power supply off after the fan stops.
The air conditioning system cannot start operating again immediately after stopping.	During the first 3 minutes after stopping operation, it is not possible to perform cooling, dehumidifying or heating operation even if the operation/stop switch is pressed to indicate "operation." This is because a circuit for protecting the compressor is activated (the fan is operating during this period).

No air comes out during dehumidifying operation. The airflow volume cannot be changed.	During dehumidifying operation, the fan automatically operates in a weak airflow/stop cycle in order to prevent too much cooling and temperature increase.
The swing louver moves on its own.	The swing louver automatically swings twice when the power supply switch is turned on. This is not an error. The swing louver also moves automatically to the horizontal position when "实便" (PREPARATION OF HEATING) is displayed.
The outdoor unit discharges water or steam during heating operation.	Water or steam is discharged when frost that has built up on the surface of the heat exchanger in the outdoor unit is removed (defrost operation).
The operation mode display on the remote controller flashes (in the case of cooling, dehumidifying and heating).	The mode display flashes when the operation modes of indoor units are different and fan operation is performed. Use the indoor units in the same operation mode or stop the operation of other units (with KXR, the heating/cooling free layout multi system, it is possible to operate indoor units in different cooling/heating modes).
The fan of the outdoor unit does not rotate at operation.	The fan is automatically stopped during defrost operation and heating operation when the outside air temperature is high. In cooling operation as well, a function to control the number of fans to be operated is automatically activated when the outside air temperature becomes low.  Request: The fan, even if it is stopped, may suddenly begin to operate; do not insert fingers and/or other elongated devices.
Slapping sounds are heard.	These sounds are generated when resin components expand and contract due to warm air.
Hissing sounds are heard when the operation is stopped or during defrost operation.	These sounds are generated when the refrigerant valve inside the air conditioning system is activated.
The operation started automatically, as soon as the power supply switch was turned on.	When the power failure compensation is enabled, the system starts operating after the power recovers under the same conditions as before the power failure occurred or the power supply switch was turned off.  Page 18
The setting temperature cannot be changed (the setting temperature display flashes).	If the temperature setting is fixed, the setting temperature cannot be changed even if you press the
The airflow becomes weak if the operation mode is changed during operation (in the case of the heating/cooling free layout multi system KXR).	When you switch the operation mode from Cool to Heat or from Heat to Cool during operation, the airflow becomes weak for 3 minutes.
1	I .

# ABOUT INSPECTION DISPLAY, FILTER MESSAGE DISPLAY, AIR CONDITIONING UNIT NUMBER AND OPERATION STANDBY DISPLAY

## WHEN THE CHECK INDICATOR LIGHT (RED) FLASHES



■ The air conditioning system stops if an error occurs.

At the same time, the check indicator light flashes in red and the error code is displayed in the on timer display area and the following is displayed in the display area.

" I/U  $N_{0}$ ,00 "  $\leftrightarrow$  "PROTECT STOP" (lit for 2 seconds each)

(Air conditioning unit No.)

Air conditioning unit No.

### **Error Display when Using Multiple Indoor Units**

■ If errors have occurred for all the connected air conditioning units

Initially, the error display shows information about the air conditioning unit whose air conditioning unit No. is the smallest.

Errors of other air conditioning units can be checked with the following procedure.





### Press the AIR CON No. switch.

The remote controller goes into the air conditioning unit No. display mode.

 If you do not press any switches for 10 seconds after entering the air conditioning unit No. display mode, the remote controller automatically exits from the air conditioning unit No. display mode and returns to the original display.



### Press the \_ switch.

The air conditioning unit No. and error codes are displayed in order, starting from the smallest unit number.

Press the w switch to display the air conditioning unit No. and error codes in the reverse order.

■ If errors have occurred for some of the connected air conditioning units

Only the air conditioning units for which errors have occurred stop operating. The remote controller shows operating air conditioning units.





#### Press the AIR CON No. switch.

The remote controller goes into the air conditioning unit No. display mode.

 If you do not press any switches for 10 seconds after entering the air conditioning unit No. display mode, the remote controller automatically exits from the air conditioning unit No. display mode and returns to the original display.



### Press the \_ switch.

The air conditioning unit No. is displayed in order starting from the smallest number, and error codes are displayed for erroneous air conditioning units.

Press the w switch to display the air conditioning unit No. and error codes in the reverse order.



If you press the " ON/OFF" switch once while an error is displayed, the error display turns off and the stop status is displayed.
 If you press the " ON/OFF" switch again, the error display appears.

## WHEN THE FILTER CLEANING MESSAGE IS DISPLAYED



The "FILTER CLEANING" message is displayed if the cumulative number of operation hours of the indoor unit reaches the set number of hours in order to notify that the air filter should be cleaned.

Clean the air filter.



The filter cleaning message is displayed in the display area. It is displayed for 1 second every 5 seconds while the air conditioning system is operating. It is always lit while the system is stopped.

### After cleaning



Press the " RESET" switch.

The filter cleaning message disappears

## **HOW TO DISPLAY AIR CONDITIONING UNIT NO.**

By operating the AIR CON No. switch, the numbers of the connected air conditioning units and error codes of units with error history are displayed.





#### Press the "AIR CON No." switch.

The remote controller goes into the air conditioning unit No. display mode and shows the smallest air conditioning unit No. among the connected air conditioning units. All other displays are turned off.

 If you do not press any switches for 10 seconds after entering the air conditioning unit No. display mode, the remote controller automatically exits from the air conditioning unit No. display mode and returns to the original display.



### Press the \_ switch.

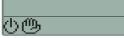
The air conditioning unit No. is displayed in order starting from the smallest number, and error codes are displayed for erroneous air conditioning units.

Press the w switch to display the air conditioning unit No. and error codes in the reverse order.



- The air conditioning unit No. can be displayed while the air conditioning system is being operated, while it is stopped, or while it
  is stopped forcefully due to errors.
- Switches other than "AIR CON No.," "▲" and "▼" cannot be operated.

## **ABOUT OPERATION STANDBY DISPLAY**



If you press the operation/stop switch when you start operating the air conditioning system at the start of the season or after it has been stopped for a prolonged period, "①⑩ " is displayed for several seconds before the display switches to the operation display. In this case the air conditioning system remains stopped, but this is not a failure. Please wait for a while, as normal operation will become possible after a short period of time.

## **ABOUT PREPARATION OF HEATING**

## CASES WHEN "汶@

## " (PREPARATION OF HEATING) IS DISPLAYED

" is displayed in the remote controller display area in the following cases.

The remote controller displays " 🔅 😃 and the operation display alternately.

At Starting Heating Operation

In order to prevent cool air from blowing out, the airflow into the room may be stopped depending on the room temperature at the start of heating operation. Please wait approximately 2 to 7 minutes; the operation automatically switches to the normal heating operation.

At Defrost Operation (during Heating Operation)

Under conditions where frost may easily build up on the surface of the heat exchanger of the outdoor unit, the heating operation is automatically stopped for approximately 5 to 10 minutes per hour (both the indoor and outdoor units stop blowing air) and defrost operation is executed. After the defrost operation is completed, the operation automatically switches back to normal heating operation.

When the Room Temperature Controller is Activated during Heating

When the room temperature increases and the room temperature controller is activated, the airflow is automatically turned down. When the room temperature decreases, the operation automatically switches back to normal heating operation.

### ABOUT HEATING OPERATION

### **About Heating Operation**

Heat Pump Type Heating

Heat pump type heating refers to a mechanism that heats the room by drawing heat in the air outside the room in by means of the refrigerant.

Defrost Operation

When heating with a heat pump type air conditioner, frost will eventually build up on the surface of the heat exchanger of the outdoor unit if the temperature outside the room decreases. In orthing is done, the heating efficiency decreases. In order to deal with this, the operation is automatically switched to defrost operation to remove the frost. During this period, the airflow of the indoor and outdoor units is stopped and "读像" "is displayed.

Outside Air Temperature and Heating Capacity

The heating capacity of a heat pump type air conditioner decreases as the outside air temperature becomes lower. If the heating capacity is insufficient, it may be necessary to use other heaters as well.

Time Required until the Room Temperature Increases

A heat pump type air conditioner circulates warm air in order to warm the entire room; it takes a while for the room temperature to increase. It is therefore a good idea to start operating early on days with unusually cold mornings, etc.

## ABOUT POWER FAILURE COMPENSATION



The remote controller has a power failure compensation function, which can be enabled (disabled at shipment from the factory). Please consult the
dealer from whom you purchased the air conditioning system.

#### ■ What is Power Failure Compensation?

- When a power failure occurs or the power supply switch is turned off, this function allows the system to automatically resume operation
  with the remote controller settings made before the power failure when the power supply recovers. If the air conditioning system was
  stooped before the power failure, it remains stooped after the power recovers.
- Note that the following must be set again with the remote controller.
- ① Timer operation settings: All timer operation settings are canceled. Weekly timer settings, however, recover with holiday setting.
- ② Auto swing (for remote controllers equipped with this function): The swing louver automatically stops at the horizontal position.

Request: If the power failure compensation is enabled, make sure to stop the operation before turning the power supply switch off. (If the power supply switch is turned off while the system is operating, the fan of the indoor unit will begin rotating immediately after the power supply switch is turned on. Moreover, the outdoor unit will start operating approximately 3 minutes after turning the power supply switch on.)

## ABOUT SETTING TO DISABLE SWITCH OPERATION (WIRED REMOTE CONTROLLER)



• The operation of the following switches can be disabled. If a switch whose operation is disabled is pressed, " & INVALID OPER," is displayed and the remote controller returns to the original display. Consult the dealer from whom you purchased the air conditioning system for the setting.

① ① ON/OFF switch ② Temperature setting switch ③ LOUVER switch ④ MODE switch ⑥ FAN SPEED switch ⑥ TIMER switch

## ABOUT INSTALLATION, MOVING AND INSPECTION MAINTENANCE

Please observe the following points in order to use the air conditioning system in a safe and comfortable manner.

Make sure to request the dealer to perform any installations, etc.; do not try doing so by yourself.

### INSTALLATION LOCATION

Is the system installed in a well ventilated place?

Are there any obstacles? If the airflow is obstructed, the efficiency of the air conditioning system may be lowered and the operation may become noisy.

Can cool/warm air and operation noise cause problems to your neighbors?

### **ELECTRICAL WORK**

**△** Caution: Make sure to perform grounding work.

Do not connect the ground wire to a ground wire connected to any gas pipes, water pipes, lightning conductors or telephones. If the grounding is incomplete, electric shock may occur.

△ Caution: It is necessary to install a leakage breaker.

If a leakage breaker is not installed, electric shock may occur.

Electrical work and grounding work must be conducted by qualified personnel according to the standard rules for electric equipment.

- Is the wiring dedicated for the air conditioning system?
- Is the remote controller switch mounted correctly?
- In the case of exposed wiring, is the wiring fixed with the attached screws?
- Is the attached remote controller clamp used for fixing the remote controller cord?
- Is the system installed at a height where children cannot reach?

### **AT MOVING**

 $\Delta$  Warning: Make sure to consult a dealer or specialist if it is required to move and reinstall the air conditioning system.

If the air conditioning system is installed incorrectly, water leakage, electric shock and/or fire may occur. Note that an installation fee will be charged for removal and installation.

## **ABOUT INSPECTION MAINTENANCE**

Normally the efficiency of the air conditioning system will become lower after a while, because dirt accumulates inside the system. This occurs gradually in 3 years or so of usage, depending on the usage conditions and surrounding environment. It is thus necessary to conduct inspection maintenance in addition to regular maintenance. We recommend you to consult the dealer from whom you purchased the system and sign an inspection contract (charged).

## **OPERATION RANGE**

Request: Please use the system in the following operation range. If the system is operated outside this range, the protection circuits may be activated to prevent the operation.

Condition Operation	Room temperature	Temperature outside the room	Humidity inside the room
Cooling operation  Dehumidifying operation	Approximately 21 to 32°C If you operate the system for extended periods of time below approximately 21°C, frost may build up on the surface of the heat exchanger, and the cooling/dehumidifying operation may not be satisfactory.	Approximately -5 to 43°C	Approximately 80% or less If you operate the system for extended periods of time under high humidity, dew may form on the surface of the air conditioning system, which may cause water to drip, or smoky vapor may be generated from the outlet opening.
Heating operation	Approximately 27°C or less	Approximately -15 to 21°C If the outside air temperature becomes too low, the heating efficiency is lowered and it becomes difficult to warm up the room.	



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